

## CLAIMS

1. A method for accurately detecting an attitude of a moving body, the moving body including a high-accuracy attitude detection mechanism having a pair of a first attitude detection section for detecting the attitude of the moving body and a second attitude detection section which provides an output inverted from that of the first attitude detection section, the method comprising the steps of:
  - 10 performing arithmetic processing which mutually compensates for a variation in the output of both of the attitude detection section, and accurately detecting the attitude information of the moving body.
- 15 2. The method for accurately detecting an attitude of a moving body according to claim 1, wherein the moving body includes a control arithmetic processing mechanism for detecting the attitude of the moving body by using the output of the attitude detection section as an input signal, and the attitude detection section and the control arithmetic processing mechanism are driven by a common driving power supply.

3. Apparatus for accurately detecting an attitude of a moving body comprising:

a high-accuracy attitude detection mechanism having a pair of a first attitude detection section for detecting the 5 attitude of the moving body and a second attitude detection section which provides an output inverted from that of the first attitude detection section,

the apparatus being capable of accurately detecting the attitude information of the moving body by incorporating into 10 the high-accuracy attitude detection mechanism an arithmetic processing feature which mutually compensates for a variation in the output of both of the attitude detection section.

4. The apparatus for accurately detecting an attitude of 15 a moving body according to claim 3, wherein

the attitude detection section are rate gyroscopes, a pair of rate gyroscopes forming a high-accuracy attitude detection mechanism is mounted on the moving body in opposite directions to each other, and

20 the attitude information of the moving body is detected by a differential signal obtained from the output signals of the rate gyroscopes.

5. The apparatus for accurately detecting an attitude of a moving body according to claim 3, wherein

the attitude detection section are acceleration sensors,

a pair of acceleration sensors forming a high-accuracy

5 attitude detection mechanism is mounted on the moving body in opposite directions to each other, and

the attitude information of the moving body is detected by a differential signal obtained from the output signals of 10 the acceleration sensors.

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6. The apparatus for accurately detecting an attitude of a moving body according to claim 3, wherein

the attitude detection section are inclination sensors,

a pair of inclination sensors forming a high-accuracy

15 attitude detection mechanism is mounted on the moving body in opposite directions to each other, and

the attitude information of the moving body is detected by a differential signal obtained from the output signals of 20 the inclination sensors.

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7. The apparatus for accurately detecting an attitude of a moving body according to claim 3, wherein

the attitude detection section is formed by a pair of rate gyroscopes and a pair of acceleration sensors,

25 each of the pair of rate gyroscopes and acceleration

sensors forming a high-accuracy attitude detection mechanism is mounted on the moving body in opposite directions to each other, and

the attitude information of the moving body is detected  
5 by a differential signal obtained from the differential signal  
of output signals of the rate gyroscopes and that of output  
signals of the acceleration sensors.

8. The apparatus for accurately detecting an attitude of  
10 a moving body according to claim 3, wherein

the attitude detection section is formed by a pair of  
rate gyroscopes and a pair of inclination sensors,

each of the pair of rate gyroscopes and the pair of  
inclination sensors forming a high-accuracy attitude detection  
15 mechanism is mounted on the moving body in opposite directions  
to each other, and

the attitude information of the moving body is detected  
by a differential signal obtained from the differential signal  
of output signals of the rate gyroscopes and that of output  
20 signals of the inclination sensors.

9. The apparatus for accurately detecting an attitude of  
a moving body according to any one of claims 3 through 8,  
comprising:

25 at least a pair of moving body attitude detection section,

and

a control arithmetic processing mechanism for detecting the attitude of the moving body by using the output of the attitude detection section as an input signal, wherein

5 the attitude detection section and the control arithmetic processing mechanism are connected to a common driving power supply.

10. A high-accuracy attitude detection apparatus for  
10 accurately detecting an attitude of a moving body according to any one of claims 3 through 9, wherein

the moving body is a walking robot.